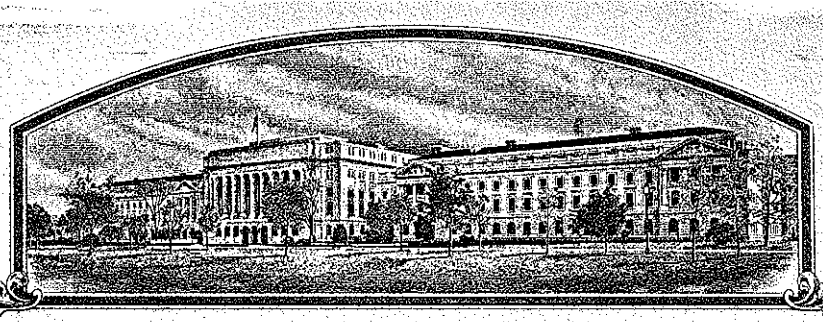

No. 7900120

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Wilbur-Ellis Company
Seed Division

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT TY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Alpha 1'

VARIETY PROTECTION OFFICE
DEPARTMENT OF AGRICULTURE

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 26th day of February in the year of our Lord one thousand nine hundred and eighty.

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

FORM APPROVED
OMB NO. 40-R3822

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: *See Reverse.*

FOR OFFICIAL USE ONLY

1a. TEMPORARY DESIGNATION OF VARIETY: WE 308	1b. VARIETY NAME: Alpha I
2. KIND NAME: Pea	3. GENUS AND SPECIES NAME: Pisum satiuum
4. FAMILY NAME (BOTANICAL): Leguminosae	5. DATE OF DETERMINATION: July 1, 1979
6. NAME OF APPLICANT(S): Wilbur-Ellis Company Seed Division	7. ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*): E. 12001 Empire Way Spokane, Washington 99206
8. TELEPHONE AREA CODE AND NUMBER: (509) 922-1774	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (*Corporation, partnership, association, etc.*) Corporation	10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION: California
11. DATE OF INCORPORATION: 1924	

PV NUMBER	7900120		
FILING DATE	9-25-79	TIME	3:00 A.M. (P.M.)
FEE RECEIVED	$ 250.00 $ 250.00 250.00	DATE	9-24-79 9-24-79 11-13-79

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Wilbur-Ellis Company- Seed Division
E. 12001 Empire Way
Spokane, Washington 99206 Attn: Bruce Tainio

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Novelty Statement.
- [X] 13C. Exhibit C, Objective Description of the Variety *(Request form from Plant Variety Protection Office.)*
- [X] 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [ ] YES [X] NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? [ ] YES [X] NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? [ ] FOUNDATION [ ] REGISTERED [ ] CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? [ ] YES [X] NO *(If "Yes," give name of countries and dates.)*

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? [X] YES [ ] NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

9/10/79
(DATE)

(SIGNATURE OF APPLICANT)
Wilbur-Ellis Co.-Seed Division
Bruce Tainio, Manager

(DATE)

(SIGNATURE OF APPLICANT)

FORM GR-470 (1-78)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and $500 fee ($250 filing fee and $250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.

13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability.

13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.

13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.

13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.

14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)

15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

WILBUR-ELLIS COMPANY
SEED DIVISION

13 A EXHIBIT A

Alpha I was derived from the following crosses: [(Recette X PI 236493) X PI 236493] x^3 B572-543.

Recette- is a Dutch variety developed by Sluis & Groot of Holland.

PI 236493- is a high ovule count line from the Lamprecht collection, number 325.

B 572-543- is a multi podded, multi resistant line from Marx at Cornell University.

Recette was crossed with PI 236493. The Progency was then backcrossed one time to intensify the genes for high ovule character to PI 236493. The Progency from this backcross were advanced to the F_3 generation and crossed with B572-543. This material was then advanced to the F_5 generation where it was single plant selected for ovule number and multipule podding characters. Transgressive segregates for earliness and lateness were observed at this point also. The later maturity plant types appeared to be segregating as to numbers of pods per peduncle, some plants having 2 pods and others having three pods.

The three podded types were advanced to the F_8 generation where we found them to be genetically stable and at that point we began an increase program to our present quantities. We have observed no variants during our past three multiplications which we feel is evidence of uniformity and stability.

MAIN OFFICE: 12001 Empire Way, Spokane, WA 99206 ● Cable Address: WILBURELL-SPOKANE ● 509-922-1774
SALES OFFICE: Route 1 Box 128 B, Northfield, Minnesota 55057 ● 507-645-4841

7900120

WILBUR-ELLIS COMPANY

SEED DIVISION

ALPHA I

13 B EXHIBIT B

Wilbur-Ellis Company believes that we are the origional and only breeder of the variety Alpha I and base novelty on the following:

Alpha I most closely resembles the Dutch variety Recette.

Novelty is based on the following differences:

Alpha I averages 9 peas per pod
Recette averages 7.4 peas per pod

Alpha I averages 20% more 4 sieve peas than Recette
Alpha I averages .5 average sieve size larger than Recette
Alpha I average dry seed weight per 1000 seeds is 10 grams greater than Recette
Alpha I first blooms on the 15th and 16th node, where as Recette first bloom node is 14th- making Alpha I 3 to 5 days later maturing than Recette.

Alpha I bears its pods in a more concentrated set toward the top of the plant than does Recette-making Alpha I more uniform in maturity.

Alpha I averages 10cm taller plant height than Recette

Alpha I pod characters resemble Resette most closely, however the length of Alpha I pods are 8cm and Recette are 7.5cm.

MAIN OFFICE: 12001 Empire Way, Spokane, WA 99206 ● Cable Address: WILBURELL-SPOKANE ● 509-922-1774
SALES OFFICE: Route 1 Box 128 B, Northfield, Minnesota 55057 ● 507-645-4841

7900120

ALPHA-I VARIETY NAME DESIGNATION OWE30879 VARIETY NUMBER

3 TYPE OF SAMPLE 0 = na (no answer); 1 = cross; 2 = single plant selection; 3 = bulk selection

ORIGIN [(Recette x PI 236493) x PI 236493] x³ B572-543

F0 GENERATION

HISTORY (FOR PREVIOUS YEAR)

VARIETY NAME DESIGNATION WE30879-2 VARIETY NUMBER

3 DISPOSITION 0 = na; 1 = discard; 2 = hold; 3 = increase; 4 = increase and reselect; 5 = increase and retest; 6 = test for disease reaction; 7 = sample to research station; 8 = sample to customer

1 USE 0 = na; 1 = canner; 2 = canner-freezer; 3 = dry edible; 4 = edible pod; 5 = feed grain

1 GENERAL TYPE 0 = na; 1 = garden; 2 = field; 3 = edible pod

1 INTERNODE TYPE 0 = na; 1 = internodes straight; 2 = internodes zigzag

[ ] SEASON: NODE NUMBER OF FIRST BLOOM 0 = na; 1 = early (8th-12th node); 2 = midseason (13th-15th node); 3 = late (16th-24th node)
15-16

MATURITY 04 number of days earlier than 5 13 number of days later than 1

1 = Alaska WR; 2 = Thomas Laxton WR; 3 = Little Marvel; 4 = Wando; 5 = Alderman WR

COMPARATIVE PLANT HEIGHT 22 cm. shorter than 2 14 cm. taller than 1

1 = Alaska WR; 2 = Thomas Laxton WR; 3 = Little Marvel; 4 = Wando; 5 = Alderman WR

ABSOLUTE PLANT HEIGHT 75 cm. high

VINE

1 Habit 0 = na; 1 = determinate; 2 = undecided; 3 = indeterminate. 1 Node Color 0 = na; 1 = green; 2 = red blotch

3 Stockiness 0 = na; 1 = slim (Alaska); 2 = medium (Thomas Laxton WR); 3 = heavy (Alderman)

2 Branching 0 = na; 1 = none; 2 = one to two branches (Little Marvel); 3 = more than two branches (Dwarf Grey Sugar)

15-16 Number of Nodes to First Bloom 03 cm. Internode Length (just below first flowering node)

[ ] Color (Royal Society Color Chart)

LEAFLETS

[ ] Color 3 Wax 0 = na; 1 = none; 2 = light; 3 = medium; 4 = heavy 2 Marbling 0 = na; 1 = none; 2 = marbled

2 Number of Pairs 0 = na; 1 = one; 2 = two; 3 = three or more; 4 = not paired; 5 = none

STIPULES

2 Presence 0 = na; 1 = lacking; 2 = present 2 Marbling 0 = na; 1 = not marbled; 2 = marbled

2 Color Compared with Leaflets 0 = na; 1 = lighter; 2 = same; 3 = darker 1 Clasping 0 = na; 1 = not cls. 2 = cls.

3 Size Compared with Leaflets 0 = na; 1 = smaller; 2 = same; 3 = larger

FLOWER COLOR

2 Venation 1 Standard 1 Wing 1 Keel 0 = na; 1 = white; 2 = greenish; 3 = lavender; 4 = purple; 5 = red

1 Monocolor or Bicolor 0 = na; 1 = monocolor; 2 = bicolor

PODS

2 Shape 0 = na. 1 = straight; 2 = slightly curved; 3 = curved 1 End 0 = na; 1 = pointed; 2 = blunt (Alaska)

[ ] Color 1 Surface 0 = na; 1 = smooth; 2 = rough 08 cm. Length 15 mm. Width (between sutures)

Number of Pods/Peduncle 0 4 0 5 0 6 0 7 0 8 0 9 0 10 0 11 0 12 0 13 0 14 3 15 3 16 3 17

2 18 1 19 0 20 0 21 0 22 0 23 0 24 09 Seeds per Pod

YIELD AND EFFICIENCY

[ ] 447 Eco. Yield gms. 20 Harvest index (%) 2171.7 Biological Yield in grams

NODULATION

2 Presence 0 = na; 1 = not present; 2 = present 3.8 mm. Size if Present [ ] Color

0 Insect Damage 0 = na; 1 = nemotode; 2 = citona larva; 3 = nemotode and citona larva

Lateral Roots: 23 # of nodules at a depth less than 15 cm. 10 # of nodules at a depth greater than 15 cm.

Primary Roots: 00 # of nodules at a depth less than 15 cm. 00 # of nodules at a depth greater than 15 cm.

7

7900120

5-100 TENDEROMETER SEEDS

1 Shape 0 = na; 1 = flattened; 2 = angular; 3 = oval; 4 = rounded ___ Surface Color ___ Coty Color

2 Surface 0 = na; 1 = shiny; 2 = dull. English-Sieve Seed Distribution (%): 18 ~~waste smaller than~~ sieve #1;

20 ~~useable larger than~~ sieve #2; 26 ~~ditto than~~ sieve #3; 35 ~~than~~ #4; 01 ~~than~~ #5 00 than #6;

00 #7; 00 ~~than~~ #8; 00 ~~than~~ #9. Metric-Sieve Seed Distrib.(%): ___ waste smaller than 7.10 mm;

___ useable larger than 7.90; ___ ditto than 8.71; ___ than 9.51; ___ than 10.30; ___ than 11.10

ATURE, DRY SEEDS

2 Mono or Bicolor 0 = na; 1 = monocolor; 2 = bicolor. Green Primary Color White Secondary Color

2 Color Pattern 0 = na; 1 = splashed; 2 = mottled; 3 = striped; 4 = flecked; 5 = dotted; 6 = uniform color

1 Hilum Floor Color 0 = na; 1 = white; 2 = tan; 3 = black Green Coty col. 15 gm/100 seeds 14 size in 64ths"

1 Shape 0 = na; 1 = flattened; 2 = angular; 3 = oval; 4 = rounded 01 Surface 1 = wrinkled; 10 = smooth

LANT REACTION TO ELEMENTS

07 Drought 00 Cold 06 heat 0 = not tested; 1 = most susceptible; 10 = most resistant

___ Quantity of Seeds Planted 2500 Weight of Seeds Planted in grams

LOCATION

BT Range # (1-50) 010 Row # (1-200) 002 Wire # (1-500) 01 Field # (1-50)

X Range Axis Y Wire Axis 0 = na; 1 = E to W; 2 = W to E; 3 = N to S; 4 = S to N

DATES

052279 Planting Date (month, day, year) 0063 Up (month, day) 0077 Bloom

0727 Canning 0034 Cut 0087 harvest

STAND

97 Emergence (up to ~~400~~) ___ Plants per square yard (up to 500)

WEIGHT

___ Field Run (up to 40,000 lb) ___ (up to 1,000,000 gm)

___ Mill Run (ditto) ___ (ditto)

D014.5 Hand Picked (ditto) ___ (ditto)

INVENTORY

1101 up to 40,000 lb ___ up to 1,000,000 gm

7-9-(4) 7-10-100 7-11-294 7-12 279 7-13-334 7-14-391 7-15-692 7-16 1096 7-17 957 7-18-777 7-19-673

DISEASE: 0 = not tested; 1 = most susceptible; 10 = most resistant

Root Rot Complex: 10 ascochyta 00 aphanomyces 00 rhizotonia 00 pythium 00 fusarium solani

00 sclerotinia. Fus.Wilt: 10 race 1 00 2 00 3 00 4 00 5 00 6 01 P.S.B.M. virus

DISEASE: 0 = not tested; 1 = absolutely susceptible; 2 = segregating for resistance; 3 = absolutely resistant.

0 pea enation mosaic 0 yellow bean mosaic 0 pea-seed borne mosaic 0 bacterial blight. Insects: 0 aphid

0 citona or leaf weevil 0 common pea weevil 0 nemotods 0 wire worms

MILDEW: 0 = not tested; 1 = susceptible; 2 = segregating for resistance; 3 = absolutely resistant

1 powdery mildew 1 downy mildew

ROOT STRUCTURE TYPE CA

QUALITY OF PEAS

01 % of defective peas 000 color of processed peas

Bitterness: 0 = no test; 1 = most bitter; 10 = least bitter 09 Unprocessed 10 Processed

Starchiness: 0 = no test; 1 = most starchy; 10 = most sweet 09 Unprocessed 09 Processed

8

ADDITIONAL NOTES

ROOT STUDY

7900120

Plant: UE 308-79-5

Length of Tap Root 109 cm.

1. Less than 15.3 cm depth
   A. Length of lateral roots (cm)
      1. 7
      2. 9
      3. 13 13.6 average
      4. 17
      5. 22

   B. Density of Lateral root fibers 5 fibers/cm^2

   C. Length of hair roots
      1. 5 (cm)
      2. 5
      3. 2 3.2 average
      4. 3
      5. 3

   D. Density of hair roots 9 fibers/cm^2

2. Greater than 15.3 cm depth
   A. Length of lateral or hair roots off tap root (every 3 cm down tap root.) (cm)
      1. 49
      2. 12
      3. 3
      4. 8
      5. 5
      6. 5
      7. 3
      8. 5½

3. Number of nodules/root fibers
   A. Lateral root: .38

   B. Tap Root
      1. Less than 15.3 cm depth 23
      2. Greater than 15.3 cm depth 10

4. Diameter of Primary Root
   A. 2cm 2mm
   B. 6cm 1.3mm
   C. 12cm 1.1mm
   D. 24cm 1mm

markings enhanced
JEF 800129

7900120

PLOT NO: VF 308-79-5

Total Wt	Pod Wt with peas	Vine Wt	Pod Wt without	Peas per Pod	Pods per Plant
2171.7 gm.	949.0 gm.	1222.7 gm.	455.6 gm.	8.5	10.3

Color Score	(1-10)	Vine Ht	Total Pea Wt
- 8 -		75 Cm.	447.8 gm.

WASTE	1	2	3	4	5	6 & over
447.8	1.6 gm.	79.2 gm.	74.6gm.	115.9gm	154.8 gm.	16.2 gm	-0-
		17.7	16.7	25.9	34.6	.04	
		18	17	26	35	.04	96%
METRIC WASTE		7.5	6.2	8.75		9.73	

10/64

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-14
(3-78)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION
NATIONAL AGRICULTURAL LIBRARY
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Pea)

OBJECTIVE DESCRIPTION OF VARIETY
PEA *(PISUM SATIVUM)*

NAME OF APPLICANT(S)
WILBUR -ELLIS CO. SEED DIVISION

ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*
12001 E. Empire Way
Spokane, Washington 99206

VARIETY NAME OR TEMPORARY DESIGNATION
Alpha I

FOR OFFICIAL USE ONLY
PVPO NUMBER 7900120

Place the appropriate number that describes the varietal character in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. TYPE:

[1] 1 = GARDEN 2 = FIELD 3 = EDIBLE-PODDED

2. MATURITY:

[ ] 15-16 Node number of first bloom: [0][6][8] No. of days to processing [1][5][5][0] Heat Units

[0][4] No. of days *Earlier* than . . . [5] 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL

[1][3] No. of days *Later* than . . . . [1] 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

3. PLANT HEIGHT:

[0][7][5] CM. HIGH

[2][2] Cm. *Shorter* than . . . . . [2] 1 = ALASKA WR 2 = THOMAS LAXTON WR 3 = LITTLE MARVEL

[1][4] Cm. *Taller* than . . . . . [1] 4 = WANDO 5 = ALDERMAN WR 6 = AUSTRIAN WINTER

4. VINE:

[1] Habit: 1 = DETERMINATE 2 = INDETERMINATE [3] Stockiness: 1 = SLIM (Alaska) 2 = MEDIUM (Thomas Laxton WR) 3 = HEAVY (Alderman)

[2] Branching: 1 = NONE (Alaska) 2 - 1–2 BRANCHES (Little Marvel) 3 = MORE THAN 2 BRANCHES (Dwarf Gray Sugar)

[1] Internodes: 1 = STRAIGHT 2 = ZIG ZAG [2][0] NUMBER OF NODES

5. LEAFLETS:

[2] Color: 1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR) 3 = DARK GREEN (Alderman) 4 = OTHER (Specify)

[3] Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 4 = HEAVY [2] 1 = NOT MARBLED 2 = MARBLED (Alaska)

[3] Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = THREE OR MORE

6. STIPULES:

[2] 1 = LACKING 2 = PRESENT [1] 1 = NOT CLASPING 2 = CLASPING

[2] 1 = NOT MARBLED 2 = MARBLED [3] Size (Compared with leaflets): 1 = SMALLER 2 = SAME 3 = LARGER

[2] Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER

7. FLOWER COLOR:

[2] VENATION [1] STANDARD [1] WING [1] KEEL 1 = WHITE 2 = GREENISH 3 = LAVENDER 4 = PURPLE 5 = RED 6 = OTHER (Specify) _____

7900120

8. PODS:

[2] Shape: 1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED

[1] End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)

[2] Color: 1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman) 4 = OTHER (Specify) _____

[1] Surface: 1 = SMOOTH 2 = ROUGH

[1] Surface: 1 = SHINY 2 = DULL

[6] Borne: 1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPEE 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify) _____

[0 8] CM. LENGTH

[1 5] MM. WIDTH (Between sutures)

[0 9] NO. SEEDS PER POD

9. SEEDS (95–100 Tenderometer):

[2] Color: 1 = LIGHT GREEN 2 = GREEN 3 = DARK GREEN 4 = OTHER (Specify) _____

Seive: %

1	2	3	4	5	6	7	8	AVERAGE
18	20	26	35	01	00	00	00	2.81

SEEDS (Dry, Mature):

[1] Shape: 1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED

[3] Surface: 1 = SMOOTH 2 = DIMPLED 3 = WRINKLED

[2] Surface: 1 = SHINY 2 = DULL

[2] Color Pattern: 1 = MONOCOLOR 2 = MOTTLED 3 = STRIPED 4 = DOTTED

[4] Primary Color:

[1] Secondary Color:

1 = CREAMY–WHITE 2 = CREAM & GREEN 3 = LIGHT GREEN 4 = MEDIUM GREEN 5 = DARK GREEN 6 = BLUE–GREEN 7 = YELLOW 8 = BROWN 9 = RED 10 = GRAY 11 = BLACK

[1] Hilum Floor Color: 1 = WHITE 2 = TAN 3 = BLACK

[1] Cotyledon Color: 1 = GREEN 2 = YELLOW 3 = ORANGE

[1 5] GRAMS PER 100 SEEDS

10. DISEASE: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

[2] FUSARIUM WILT	[0] NEAR–WILT	[0] DOWNY MILDEW
[0] ASCOCHYTA BLIGHT	[0] POWDERY MILDEW	[0] BACTERIAL BLIGHT
[0] MOSAIC	[0] PEA ENATION MOSAIC	[0] YELLOW BEAN MOSAIC

[0] OTHER (Specify) _____

11. INSECT: (O= Not Tested; 1 = Susceptible; 2 = Resistant)

[0] APHIDS

[0] OTHER (Specify) _____

12. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Leafiness	326 Perfection	Fresh Seed Color	Taurus
Leaf Color	326 Perfection	Mature Seed Color	Taurus
Pod Color	Recette	Seed Shape	?
Pod Shape	Recette	Plant Habit	326 Perfection

COMMENTS:

WILBUR-ELLIS COMPANY
SEED DIVISION

7900120

13 D EXHIBIT D
Additional Description of the Variety Alpha I

- See attached data sheets -

6

MAIN OFFICE: 12001 Empire Way, Spokane, WA 99206 ● Cable Address: WILBURELL-SPOKANE ● 509-922-1774
SALES OFFICE: Route 1 Box 128 B, Northfield, Minnesota 55057 ● 507-645-4841